

Review Article

Polypharmacy and medication-related harm in people with disabilities: a narrative review of prevalence, mechanisms and research gaps

Sona Priyanka Auroprem^{1*}, Roopa Sri Ravichandran², Swetha Durai³, Nandhan Auro⁴,
Sabeetha Lakshmi Madhavan³, Hariharan Selvam⁵

¹Research wing, Care Max Foundation, Puducherry, India

²Clinical Development Services Agency (CDSA), Translational Health Science and Technology Institute, Faridabad, Haryana, India

³Independent Research Consultant, Tamil Nadu, India

⁴Jawaharlal Institute of Postgraduate Medical Education & Research, Government of India, Puducherry, India

⁵Department of Orthopedics, Government Medical College, Kozhikode, Kerala, India

Received: 20 July 2026

Revised: 28 August 2026

Accepted: 03 September 2026

*Correspondence:

Dr. Sona Priyanka Auroprem,
E-mail: priyanka.auroprem7@gmail.com

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ABSTRACT

People with disabilities (PWDs) experience a disproportionately high burden of multimorbidity and long-term medication use, increasing their risk of polypharmacy and medication-related harm. This narrative review synthesised evidence on the prevalence and patterns of polypharmacy, mechanisms contributing to medication-related harm, deprescribing practices, medication optimisation strategies, and research gaps among individuals with disabilities. In accordance with the Scale for the Assessment of Narrative Review Articles (SANRA) guidelines, searches of PubMed, Scopus, Google Scholar, and grey literature were conducted to identify studies published in English from January 2010 to May 2026. Eligible studies included individuals with recognised disabilities and reported outcomes related to polypharmacy, inappropriate prescribing, adverse drug events, medication-related harm, pharmacokinetic changes, or deprescribing. Due to heterogeneity in populations, disability types, and reported outcomes, findings were synthesised narratively. Evidence indicated a high prevalence of polypharmacy among individuals with intellectual and developmental disabilities, spinal cord injury, cerebral palsy, and multiple sclerosis, with substantial medication burdens occurring earlier than in the general population. Psychotropic polypharmacy was particularly prevalent among individuals with intellectual and developmental disabilities. Medication-related harm was influenced by polypharmacy, disability-specific pharmacokinetic alterations, communication barriers, medication errors, fragmented healthcare delivery, and limited continuity of care. Multidisciplinary medication reviews, structured deprescribing, and person-centred medication optimisation showed promise, although evidence remains limited, particularly in low- and middle-income countries. Strengthening medication assessment, deprescribing, accessible communication, caregiver support, and evidence-based prescribing is essential to improve medication safety and promote equitable, person-centred care for people with disabilities.

Keywords: Polypharmacy, People with disabilities, Medication safety, Adverse drug events

INTRODUCTION

Disability, often discussed as a characteristic of individuals, may be more accurately understood as a

measure of how societies, health systems and clinical practices respond to human diversity.¹ For more than 16% of the people worldwide, living with disability is not an exceptional circumstance but a routine part of life which

intersects with aging, chronic illness, social disadvantage, and healthcare access.¹ As advances in medicine have increased life expectancy among Persons with Disabilities (PWDs), attention has been shifting from survival to management of complex and lifelong health needs.² Among these, multimorbidity and the resulting use of multiple medications have emerged as critical but under-exploited challenges, raising crucial questions about medication safety, appropriateness, and equity in healthcare delivery for a population that has historically remained at the margins of clinical research and practice.³

Polypharmacy, often defined as the concurrent use of five or more medicines, although definitions vary, has become an important patient safety concern.⁴ It may include prescription drugs, over-the-counter drugs, and traditional or complementary medicines.⁵ While polypharmacy is often necessary for the management of multiple chronic conditions, inappropriate use is found associated with an increased risk of adverse drug events, drug-drug interactions, frequent falls, medication non-adherence, hospitalisation and even mortality. Research on polypharmacy has been largely focused on older adults; however, PWDs frequently experience medication burdens due to multimorbidity comparable to or greater than those of older populations, often at much younger ages.^{6,7} Despite this, evidence on the extent and implications of polypharmacy among persons with disabilities remains limited.⁸

This evidence gap is further shaped by several interconnected factors. PWDs have been historically under-represented in clinical trials, limiting the applicability of standard dosing recommendations and medication safety data to populations with distinct physiological, functional, and communication needs.⁹ Disability is also frequently viewed as a static background characteristic rather than a dynamic health context that may influence pharmacokinetics, pharmacodynamics, treatment adherence, and the recognition of adverse effects.¹⁰ Additionally, disability-focused health research continues to receive relatively limited attention despite the substantial burden of chronic diseases experienced by this population.^{11,12} Consequently, individuals with disabilities may be exposed to complex medication regimens without adequate evidence to guide safe and appropriate prescribing, increasing their vulnerability to medication-related harm.¹³ Although concerns regarding psychotropic use among people with intellectual disabilities and medication management in selected disability groups have been documented, existing evidence remains fragmented and largely confined to specific disabilities or drug classes.^{14,15} A comprehensive synthesis examining polypharmacy and medication-related harms across disability types is lacking. This narrative review seeks to address this gap by summarising current evidence on the prevalence of polypharmacy, mechanisms of medication-related harm, and intervention strategies among individuals with intellectual and developmental

disabilities, spinal cord injury, cerebral palsy, and sensory disabilities.¹⁶ We also highlight key knowledge gaps and propose priorities for future research, clinical practice and policy development.

METHODS

Review design

This study was conducted as a narrative review to provide a comprehensive synthesis of the existing evidence on polypharmacy among people with disabilities. A narrative review approach was preferred as the available literature is heterogeneous with respect to study design disability populations, medication classes, and outcome measures. Furthermore, the conduct and reporting of this review was guided by the principles of Scale for the Assessment of Narrative Review Articles (SANRA) to enhance methodological transparency, comprehensiveness and reporting quality.¹⁷

Search strategy

A comprehensive literature search was conducted in May 2026 and included studies published between January 2010 and May 2026 using the following electronic databases: PubMed, Scopus, Google scholar and grey literature. The search strategy combined terms from two conceptual domains: (i) medication-related concepts, including polypharmacy, inappropriate prescribing, adverse drug events, drug-related problems, medication-related harm, and overmedication; and (ii) disability-related concepts, including disability, intellectual disability, developmental disability, spinal cord injury, cerebral palsy, physical disability, sensory disability, autism spectrum disorder, and learning disability. Boolean operators (AND/OR) were used to combine search terms within and across domains. Reference lists of relevant articles and review papers were also screened manually to identify additional eligible studies.

Eligibility criteria

Studies were eligible if they- included human participants with one or more recognised disability types; reported findings related to polypharmacy, medication use, inappropriate prescribing, adverse drug events, pharmacokinetic alterations, medication-related harm, or deprescribing and were published in English between January 2010 and May 2026. Original quantitative and qualitative studies, registry analyses, cohort studies, case-control studies, cross-sectional studies, clinical audits, and relevant reviews were considered. Editorials, opinion articles, conference abstracts, and case reports without substantive clinical or epidemiological evidence were excluded. Studies conducted exclusively among older adults without a defined disability population were also excluded.

Study selection

Titles and abstracts retrieved from the database searches were screened for relevance. Full texts of potentially eligible articles were subsequently assessed against the predefined eligibility criteria. Additional studies identified through manual reference screening were evaluated using the same criteria before inclusion in the review.

Data extraction and synthesis

Relevant information from the included studies was reviewed and synthesised narratively, with emphasis on the prevalence and patterns of polypharmacy, factors contributing to medication-related harm, deprescribing practices, and intervention strategies, and other key findings relevant to medication safety among PWDs. Owing to the substantial heterogeneity in disability populations, study designs, healthcare settings and reported outcomes, quantitative synthesis was not relevant. Hence, the evidence was synthesised descriptively and organised into key thematic areas: prevalence and patterns of polypharmacy across disability groups, mechanisms contributing to medication-related harm, deprescribing in disability and research gaps and future directions. No formal methodological quality assessment was undertaken, as the purpose of this narrative review was to provide a comprehensive overview of the available evidence rather than to quantitatively synthesise study findings.

NARRATIVE SYNTHESIS OF THE EVIDENCE

This narrative synthesis demonstrates that polypharmacy is a pervasive yet under-recognised challenge among PWDs. Although the evidence varies considerably across disability groups, consistent themes emerge regarding the early onset of multimorbidity, high medication burden, increased susceptibility to medication-related harm, and limited evidence to guide safe and appropriate prescribing. Most published studies have focused on intellectual and developmental disabilities (IDD), spinal cord injury (SCI), and cerebral palsy (CP), whereas evidence relating to sensory disabilities and several other disability groups remains scarce.

PREVALENCE AND PATTERNS OF POLYPHARMACY ACROSS DISABILITY GROUPS

Physical and locomotor disabilities

The prevalence of polypharmacy varies across disability groups but is consistently high, reflecting the nature of their complex healthcare needs, multimorbidity, and long-term pharmacological management associated with disabling conditions. Among physical and locomotor disabilities, spinal cord injury (SCI) demonstrates one of the highest medication burdens. In a matched

retrospective cohort of 11,569 individuals with SCI, about 63% met the criteria for polypharmacy, with a median of 11 concurrent medications over a two-year period. Opioid analgesics (57%), antidepressants (46%), and muscle relaxants (40%) were the most frequently prescribed medication classes. Polypharmacy was independently associated with pneumonia, urinary tract infections, adverse drug events, and healthcare expenditures approximately four times higher than those among individuals without polypharmacy.¹⁸

Adults with Cerebral Palsy (CP) had significantly higher odds of polypharmacy than adults without, with the risk further increasing among those with co-occurring neurodevelopmental disabilities (adjusted OR: 1.38 for CP alone and 2.42 for CP with neurodevelopmental disabilities). Importantly, adults aged 18-40 years with CP and coexisting neurodevelopmental disabilities exhibited polypharmacy prevalence comparable to that of the older adults without CP, suggesting that substantial medication burden develops much earlier in life among this population.¹⁹ In multiple sclerosis (MS), polypharmacy was identified in 54 of 101 patients; around 53.5% in a prospective real-world cohort. The study demonstrated that a greater burden of MS-related medications particularly symptomatic therapies rather than medications prescribed for comorbid conditions was significantly associated with higher levels of care and an increased utilisation of therapy services. These findings suggest that medication burden in MS reflects disease complexity and additionally contributes to healthcare resource utilisation and societal costs.²⁰

Sensory disabilities

Evidence relating to sensory impairments remains limited and focuses primarily on medication management rather than the prevalence of polypharmacy. Qualitative studies among community - dwelling older adults with visual and/or hearing impairment receiving polypharmacy (>4 medications) identified a substantial medication burden, with participants using a mean of 11.0 medications, while experiencing challenges with prescription ordering, medicine storage, administration, and disposal. These findings highlight the need for accessible, person-centred pharmaceutical care and tailored medication support for individuals with sensory impairments.^{21,22} Furthermore, an observational study using the Anatomical Therapeutic Chemical (ATC) classification reported that increasing medication burden was associated with progressively greater self-reported hearing impairment, with particular drug classes, particularly cardiovascular medications and drugs pertaining to acid-related disorders. These findings underscore the need for routine audiological assessment in individuals receiving polypharmacy while recognising that the cross-sectional design precludes causal inference.²³

Intellectual and developmental disabilities

The burden of polypharmacy is particularly high among individuals with intellectual and developmental disabilities. In a cross-sectional total population study of adults with Intellectual disabilities (ID) in Jersey, 83.4% of participants were prescribed with high dose medication, while 38.2% experienced polypharmacy and 23% psychotropic polypharmacy. Overall polypharmacy was associated with older age, greater severity of ID, residential care placement, and higher comorbidity burden, whereas psychotropic polypharmacy was associated with male sex, age ≥ 50 years, and a lifetime psychiatric diagnosis.¹⁶ Psychotropic medications constituted the predominant prescribing pattern. Among autistics adults, psychotropic medication use (78.6% vs. 58.8%) and psychotropic polypharmacy (49.3% vs. 31.2%) were significantly more prevalent in those with co-occurring intellectual disability than in those without ID. The likelihood of psychotropic prescribing was also influenced by factors including age, sex, residential setting, psychiatric comorbidities and behaviours that challenge, although the relative importance of these factors differed according to the presence or absence of ID.²⁴

Similarly, a multicentric pharmacovigilance study of young adults with autism spectrum disorder (ASD) and intellectual disability also reported multimorbidity in about 37% of the participants and psychotropic polypharmacy in 57%, in which about 13% received medications at doses outside the recommended range. Risperidone was the commonly prescribed psychotropic, and risperidone-quetiapine co-prescription occurred in almost 60% of the cases without routine adverse-event monitoring, highlighting important gaps in pharmacovigilance and medication safety.²⁵

Evidence from hospital settings further highlights the substantial medication burden among adults with intellectual disabilities. A prospective observational study from a specialised hospital unit in Switzerland reported that all participants were exposed to polypharmacy, receiving a mean of 9.4 medications per week, including 5.3 psychotropic medications. Antipsychotics were the most frequently prescribed drug class, followed by benzodiazepines and laxatives. Additionally, an average of 5.7 inappropriate medications were reported per hospitalisation, highlighting the use of inappropriate prescribing despite increasing emphasis on medication optimisation and deprescribing.²⁶

Together, these findings highlight the coexistence of neurodevelopmental and psychiatric disabilities substantially increases medication burden among individuals with intellectual and developmental disabilities. A high rate of psychotropic prescribing, potentially inappropriate medications, and inadequate pharmacovigilance consistently emerge across different care settings, underscoring the need for medication

review, evidence-based prescribing, and population-specific optimisation strategies.

MECHANISMS CONTRIBUTING TO MEDICATION-RELATED HARM

Medication-related harm in PWDs is driven by factors other than polypharmacy alone. A complex interplay of disability-specific physiological changes, multimorbidity, communication difficulties, fragmented healthcare delivery and organisational barriers create a clinical environment in which medications are more prone to cause harm than benefit. These interconnected mechanisms substantially increase the risk of adverse drug events, inappropriate prescribing, and medication-related complications across disability groups.

Altered pharmacokinetics

Physiological alterations are reported with certain disabilities and are known to substantially modify drug absorption, distribution, metabolism, and excretion, potentially limiting the applicability of standard dosing recommendations. These changes are most comprehensively described in spinal cord injury (SCI), where impaired gastrointestinal motility reduces the bioavailability of passively absorbed drugs, such as theophylline, paracetamol, and doxycycline. Chronic SCI is also associated with an increase in extracellular fluid volume, leading to an expanded volume of distribution for hydrophilic drugs such as aminoglycosides (e.g., gentamicin, amikacin, and tobramycin). Changes in drug clearance have also been reported in some agents.

Altogether, these disability-specific pharmacokinetic alterations may influence drug efficacy and safety, underscoring the importance of individualised prescribing and dose optimisation in these populations.²⁷ Several medications routinely prescribed after SCI, including amikacin, baclofen, carbamazepine, diclofenac, lorazepam and vancomycin, exhibit altered pharmacokinetic profiles, with reduced renal clearance and increased elimination half-lives increasing the potential for drug accumulation and toxicity. The alterations may require dose adjustments or extended dosing intervals to improve therapeutic efficacy while minimising adverse effects.²⁸ More broadly, emerging evidence suggests that disability associated pathophysiological changes, together with inter-individual variability arising from genetic, metabolic, and ethnic factors, may further influence pharmacokinetic behaviour, reinforcing the need for patient-centred dosing strategies and greater incorporation of pharmacokinetic evidence into prescribing decisions for PWDs.¹⁰

Communication barriers and under-reporting of adverse effects

Across various disability groups, communication barriers constitute a major obstacle to safe medication use and the

timely identification of medication-related problems. Individuals with intellectual disabilities, autism spectrum disorder, and other communication impairments often encounter challenges in understanding medication information, participating in shared decision-making, and communicating medication related concerns, increasing the likelihood that adverse effects, inappropriate prescribing and administration difficulties remain unrecognized or inadequately addressed.^{8, 29}

Communication difficulties may also compromise clinical assessment, resulting in delayed or incorrect diagnosis and inappropriate medication prescribing. Healthcare professionals frequently communicate through family members or caregivers rather than directly with the individual, which can limit patient autonomy and the accurate expression of medication related concerns. Furthermore, inaccessible health information and inadequate adaptation of communication strategies further hinder patient engagement and medication safety. These challenges are compounded by the limited availability of accessible medication information and the lack of structured, disability-sensitive medication review processes, highlighting the need for multidisciplinary approaches that actively engage PWDs in decision regarding their pharmacotherapy. Continuity of care, accessible communication methods (such as easy-read materials and sign-supported communication), and collaborative partnerships between healthcare professionals, caregivers, and PWDs have been identified as important facilitators for improving medication safety and optimising pharmacotherapeutic outcomes.³⁰

Caregiver and self-mediated medication errors

PWDs primarily depend on informal caregivers for medication administration and monitoring, making the caregiver's competence crucial to medication safety. A cross-sectional study reported an average of 13.5 self-reported medication errors per caregiver annually, with errors occurring more frequently among caregivers without formal training, caregivers being male, direct family members, those with external employment and those relying on external aids. These findings affirm the importance of structured caregiver training to minimize preventable medication errors in home-care settings.³¹ Medication safety is additionally constrained in individuals with intellectual disabilities because of multimorbidity, polypharmacy, and frequent psychotropic medication use. A population-based study of older adults with ID found that about 47.5% had at least one prescription error, while 26.8% had clinically relevant errors requiring changes in pharmacotherapy. Prescription errors were associated with increase in age, frailty, higher BMI, polypharmacy and specific medications.³²

Caregivers have described being approached by individuals promoting expensive, unproven medicines with claims of improving disability-related conditions, leading some families to purchase such treatments in the

hope of recovery. As one caregiver explained, "There are many people who try to reach us and manipulate us trying to sell unknown medicine which are very expensive. We used to buy thinking that my son will get well." This highlights the need for accessible, evidence-based counselling and caregiver education to protect families from exploitative prescribing practices.³³

Independent medication management also poses safety challenges for PWDs, particularly those with visual impairment. Across studies, individuals reported difficulties identifying medicines, distinguishing medication containers, measuring correct doses, maintaining dosing schedules, and administering liquid formulations, resulting in missed doses, incorrect dosing, and occasional use of the wrong medication.^{34,35} More than half of the visually impaired individuals required assistance with medication identification, dose measurement, and checking expiry dates, while older age, complete blindness, chronic illness, polypharmacy, and lower educational attainment were associated with greater difficulties in independent medication management.³⁶ Together, these findings reported the need for accessible medication information, disability-friendly packaging and labelling, assistive technologies, and pharmacist- led education to support safe self-management of medicines among PWD.

Fragmented prescribing

PWDs often receive care from multiple specialists, each managing different comorbidities without complete oversight of the patient's overall treatment regimen. This fragmented approach increases the risk of therapeutic duplication, drug-drug interactions, and prescribing cascades, where adverse drug effects are mistaken for new conditions and often treated with additional medications rather than addressing the causative drug. Such fragmentation contributes to polypharmacy and further compromises medication safety.³⁷ Continuity of care is further compromised when individuals receive care across multiple healthcare settings and providers. Service integration is better when care is delivered within a single healthcare setting, whereas accessing multiple providers across different settings amplifies care fragmentation. Alongside, individuals with greater health literacy and healthcare access maybe more likely to consult multiple providers, contributing further to fragmented care and increased risk of medication-related problems.³⁸

DEPRESCRIBING IN DISABILITY: WHAT DO WE KNOW?

Deprescribing is the systematic process of reducing, stopping, or switching medications when the balance of harm outweighs benefit and has emerged as a key intervention strategy in addressing polypharmacy. In disability contexts, the deprescribing evidence base is narrow, predominantly confined to psychotropic

medications in IDD. Overprescribing of psychotropic medications for behaviours is well recognised among people with IDD. Literature suggests that these medications can be safely deprescribed, particularly through interdisciplinary, person-centred approaches, with potential improvements in behavioural, mental and physical health. Despite this, present evidence is limited by methodological shortcomings, underscoring the need for stronger evidence to guide deprescribing intervention.³⁹ Subsequently, a commentary emphasised that successful deprescribing extends beyond medication withdrawal alone and requires a more careful recognition of the withdrawal symptoms, differentiation of withdrawal effects from relapse and meaningful involvement of patients, carers and multidisciplinary teams through the process. Gradual deprescribing in a structured supported by shared decision-making, clear documentation of prescribing rationale and ongoing monitoring is essential to minimise adverse outcomes and for optimising drug safety.⁴⁰

MEDICATION OPTIMISATION INITIATIVES

Recognising the widespread overprescribing of psychotropic medications among people with ID and autism, NHS England introduced the Stopping Over Medication of People with a Learning Disability and Autistic People (STOMP) programme in 2016, later complemented by the Supporting Treatment and Appropriate Medication in Paediatrics (STAMP) initiative. These national programmes promote the appropriate use, regular review and optimisation of psychotropic medications, emphasising that such medicines should be prescribed only for clear clinical indications, at the lowest effective doses, and for the shortest appropriate duration. Rather than discouraging medication use, STOMP and STAMP advocate person-centred, multidisciplinary care, shared decision-making, routine medication reviews, adoption of non-pharmacological interventions and collaboration among healthcare professionals, PWDs, family and caregivers to optimise prescribing patterns.⁴¹ Medication-related harm is not limited to prescribed medicines. Evidence from community-based medication reviews among people with intellectual disabilities indicates substantial use of non-prescription medicines alongside multiple common ailments. Pharmacists frequently identified medication-related problems requiring intervention, suggesting that inadequate management of over-the-counter medicines may further contribute to medication-related harm.⁴²

DISCUSSION

The current review demonstrates that polypharmacy and medication related harm constitute significant yet underreported challenges among PWDs.¹⁶ Although the evidence base is largely driven by studies involving individuals with intellectual and developmental disabilities, spinal cord injury and cerebral palsy, sustained observations across disability groups indicate

that medication burden develops early in life and is driven by multimorbidity, long-term pharmacotherapy, and complex healthcare needs.^{43,44} Contrary to the general population, where polypharmacy is majorly associated with ageing, PWDs frequently experience substantial medication exposure during early and middle adulthood, highlighting the need for disability-specific approaches to medication management.⁴⁵ This review demonstrates that medication-related harm extends beyond the number of prescribed medications. Disability-specific physiological alternations, communication barriers, dependence on caregivers, fragmented healthcare delivery, and limited continuity of care collectively increase the risk of adverse drug events, prescribing errors, therapeutic duplication, and inappropriate prescribing.⁴⁶ These findings reinforce that the conventional approaches to medication safety may not adequately address the distinct challenges encountered by PWDs and that medication optimisation should integrate a holistic, person-centred approach encompassing both clinical and social determinants of safe medicine use.⁴⁷

This review also draws attention to the disproportionate reliance on psychotropic medications among individuals with intellectual and developmental disabilities.⁴⁸ While psychotropic medicines remain appropriate for specified clinical indications, inappropriate long-term prescribing and psychotropic polypharmacy continue to be widely documented.⁴⁹ Emerging evidence suggests that structured, multidisciplinary deprescribing interventions can reduce unnecessary medication use without compromising clinical outcomes.⁵⁰ Initiatives such as STOMP and STAMP further demonstrate how coordinated medication review, shared decision making, and multidisciplinary collaboration can support optimised prescribing while maintaining quality of life.

Regardless of the increasing recognition of these challenges, important evidence gaps remain. Most literature was from high-income countries, focusing on a limited number of disability groups, leaving a marked uncertainty regarding medication safety among individuals with sensory, physical, and multiple disabilities, particularly in low- and middle-income countries. Alongside, understanding on the disability-specific pharmacokinetic and pharmacodynamic alterations remains sparse. Greater inclusion of PWDs in clinical trials, pharmacovigilance systems, and medication optimisation research is therefore essential to strengthen the evidence base. Overall, healthcare access medication safety among PWDs should be recognised as an important component of equitable healthcare rather than solely a consequence of polypharmacy. Addressing medication-related harm will require multidisciplinary collaboration, routine medication review, accessible communication strategies, strengthened caregiver support, continuity of care, and disability-inclusive research. collectively, these measures have the potential to improve prescribing quality, minimise preventable harm and advance person-centred healthcare for PWDs.

Limitations

This review has several limitations. As a narrative review, it is inherently susceptible to selection bias because studies were identified and synthesised without the formal methodology of a systematic review. The available evidence has been disproportionately derived from PWDs, especially from high-income countries, including the UK and the United States, limiting the generalisability of the study findings to other disability groups and contexts. Considerable heterogeneity in study populations, healthcare settings, definitions of polypharmacy, and reported outcomes also limit direct comparisons across studies. Additionally, evidence for several important areas remains limited, especially for disability-specific pharmacokinetics, deprescribing interventions, and medication optimisation strategies, alongside some findings being based on older studies that require validation using contemporary clinical and pharmacological approaches.

Research priorities

This review highlights several priorities for future research. Population-based studies using standard definitions are needed to better estimate the prevalence of polypharmacy, inappropriate prescribing, and medication-related harm across different disability groups. Emphasis should be made on disability-specific pharmacokinetic and pharmacodynamic research to inform evidence-based prescribing and dose optimisation. Future studies should also evaluate multidisciplinary medication review, deprescribing interventions beyond psychotropic medications, and strategies to improve continuity of care and reduce prescribing fragmentation. In addition, the development of accessible pharmacovigilance systems, communication-adapted medication safety tools, and assistive technologies to support safe medicine use warrants further investigation. Finally, the meaningful inclusion of people with disabilities in clinical trials, pharmacovigilance programmes, and clinical guideline development is essential to strengthen the evidence base and promote equitable, person-centred medication management.

CONCLUSION

Polypharmacy is a growing and under-recognised problem for people with disabilities, driven by multimorbidity, prolonged medication use, and complex care needs. Harm from medications is not solely related to the number of drugs prescribed; it is also affected by disability-specific physiological differences, communication barriers, caregiver factors, fragmented healthcare delivery, and a lack of evidence tailored to disability. Multidisciplinary medication reviews, structured de-prescribing, and programmes such as STOMP and STAMP show promise for optimizing treatment, but they remain underused and under-evaluated across many disability groups.

Going forward, priorities should include disability-inclusive clinical research, standardized epidemiological studies, and focused pharmacokinetic and pharmacodynamic investigations, alongside the creation of evidence-based prescribing and deprescribing guidelines. Improving accessible communication, caregiver education, pharmacovigilance, and continuity of care is essential to reduce preventable medication-related harm. Treating medication safety as a core element of equitable healthcare is vital to enhancing health outcomes and quality of life for people with disabilities.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Auroprem SP, Ravichandran RS, Durai S, Auro N, Madhavan SL, Selvam H. Polypharmacy and medication-related harm in people with disabilities: a narrative review of prevalence, mechanisms and research gaps. *Int J Community Med Public Health* 2026;13:6219-27.